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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,401	09/12/2005	Clifford Charles Shone	MSQ01-003-US	2849

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ADVISORY ACTION

The amendment filed on 7/16/2009 under 37 CFR 1.116, in reply to the final rejection, has been considered but is not deemed to place the application in condition for allowance. The amendment is hereby entered.

Claim 52 is amended. Claims 51 and 59-63 are cancelled. New claims 73-78 are added. Claims 52-58 and 64-78 are pending. Claims 54, 56, and 72 are withdrawn as being drawn to non-elected inventions. Claims 52-53, 55, 57-58, 64-71, and 73-78 are currently under examination.

Claim Rejections Withdrawn

The rejection of claims 62-63 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in light of the cancellation of said claims.

Claim Rejections Maintained

35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The rejection of claims 52-53, 55, 57-58, 64-71, and newly submitted claims 73-78, under 35 U.S.C. 103(a) as being unpatentable over Shone *et al.* (PCT Publication WO 00/28041, 2000, IDS filed 1/18/2005) in view of Lehmann *et al.* (J. Neuroscience, 19:7537-7547, 1999), is maintained for the reasons set forth in the previous office action.

Applicant argues: That this rejection has been obviated by the amendment to incorporate the limitations of claims 62 and 63 into claim 52.

Applicant's arguments have been fully considered and deemed non-persuasive.

The limitations of claims 63 have been included in claim 52; however, where claim 62 referred to C3Stau2, C3Stau1, and C3bot, claim 52 now refers to *S. aureus* C3 exoenzyme 1 isoform, *S. aureus* C3 exoenzyme 2 isoform, and *C. botulinum* C3 exoenzyme. Lehmann did not teach the use of enzymes referred to as C3Stau2, C3Stau1, or C3bot, but Lehmann does teach the use of *C. botulinum* C3 exoenzyme. Therefore, the amendment does not obviate the rejection.

The rejection of claims 52-53, 55, 57-58, 64-71, and newly submitted claims 73-78 under 35 U.S.C. 103(a) as being unpatentable over Shone *et al.* (PCT Publication WO 00/28041, 2000, IDS filed 1/18/2005) in view of McKerracher (US Patent 6,855,688, 2005, filed on 4/9/2002), is maintained for the reasons set forth in the previous office action.

Applicant argues: That McKerracher teaches against using receptor-mediated targeting mechanisms. Applicant argues that McKerracher notes that other methods of delivery of C3 which use a receptor-mediated targeting mechanism have the disadvantage that much of the C3 will be restrained within a membrane compartment and states that the proteins require receptor-mediated transport, which mans that the cells must express the receptor and do so in sufficient quantities. In addition, when C3 enters the cell by receptor-mediated transport, it will be locked within a membrane component and be unavailable to inactivate Rho.

Applicant's arguments have been fully considered and deemed non-persuasive.

Where McKerracher refers to the disadvantages of using receptor-mediated transport of C3, they were describing methods that used only a receptor-mediated targeting domain with the C3. McKerracher provides a solution to this problem by using a translocation domain that allows C3 to pass through the membrane. The two disadvantages discussed by McKerracher are (1) that the target cell must express the appropriate receptor and do so in sufficient quantity and (2) that transport by receptor-mediated endocytosis leaves the C3 trapped in a membrane-bound compartment. However, both McKerracher and Shone solve these problems. Both references use a translocation domain that allows the C3 to pass through the membrane. Therefore, being trapped in a membrane-bound compartment is not an issue. In addition, Shone specifically teaches the use of the binding domain of botulinum C1 toxin in order to target neuronal cells. Therefore, we know, as did Shone, that neuronal cells express the appropriate receptor.

Therefore, McKerracher does not teach away from the instant invention, but instead teaches against the use of a C3 enzyme with only a receptor-mediated targeting domain.

Conclusion

No claim is allowed.

The claimed methods utilizing SEQ ID NOs 1, 3-5, and 7-10, as well as *S. aureus* C3 exoenzyme 1 isoform are free of the art and would be allowable.

The opportunity to amend the claims to said methods in order to reach allowance has been offered to applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gangle whose telephone number is (571)272-1181. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Mondesi can be reached on 571-272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian J Gangle/
Examiner, Art Unit 1645

/Robert B Mondesi/
Supervisory Patent Examiner,
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